

ABSTRACT

In some illustrative embodiments, a novel system and method is provided that can, for example, extend concepts of pre-authentication (such as, e.g., IEEE 802.11i pre-authentication) so as to operate across networks or subnetworks (such as, e.g., IP subnets). In preferred embodiments, a novel architecture includes one or both of two new mechanisms that substantially improve, e.g., higher-layer handoff performance. A first mechanism is referred to as "pre-configuration," which allows a mobile to pre-configure higher-layer information effective in candidate IP subnets to handoff. A second mechanism is referred to as "virtual soft-handoff," which allows a mobile to send or receive packets through the candidate IP subnets even before it is actually perform a handoff to any of the candidate IP subnets.